

## Mapping Public Media: Inside and Out

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### Documents referenced in this analysis:

*Case studies*, Center for Social Media:

- 1) The War Tapes, by Katja Wittke, American University  
[http://www.centerforsocialmedia.org/resources/articles/war\\_tapes\\_case\\_study](http://www.centerforsocialmedia.org/resources/articles/war_tapes_case_study)
- 2) A Lion in the House, by Barbara Abrash, New York University  
[http://www.centerforsocialmedia.org/resources/articles/a\\_lion\\_in\\_the\\_house/](http://www.centerforsocialmedia.org/resources/articles/a_lion_in_the_house/)
- 3) Global Voices, by Martin Lucas, Hunter College  
[http://www.centerforsocialmedia.org/resources/articles/global\\_publics/](http://www.centerforsocialmedia.org/resources/articles/global_publics/)

*Maps and Analysis*, Govcom.org

- 1) Research Protocol: *Conversation Pieces: Public Media Projects and Their Publics*  
[http://www.centerforsocialmedia.org/files/pdf/map\\_research\\_protocol.pdf](http://www.centerforsocialmedia.org/files/pdf/map_research_protocol.pdf)
- 2) Introduction: *Conversation Pieces: Public Media Projects and their Publics—A New Media Analysis*  
By Richard Rogers and the Govcom.org Foundation, Amsterdam  
[http://www.centerforsocialmedia.org/files/pdf/Intro\\_maps.pdf](http://www.centerforsocialmedia.org/files/pdf/Intro_maps.pdf)
- 3) *Conversation Pieces: The War Tapes*  
[http://www.centerforsocialmedia.org/files/pdf/War\\_tapes\\_maps.pdf](http://www.centerforsocialmedia.org/files/pdf/War_tapes_maps.pdf)
- 4) *Conversation Pieces: A Lion in the House*  
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- 5) *Conversation Pieces: Global Voices*  
[http://www.centerforsocialmedia.org/files/pdf/Global\\_voices\\_maps.pdf](http://www.centerforsocialmedia.org/files/pdf/Global_voices_maps.pdf)
- 6) *Conversation Pieces: Conclusions*  
[http://www.centerforsocialmedia.org/files/pdf/maps\\_conclusion.pdf](http://www.centerforsocialmedia.org/files/pdf/maps_conclusion.pdf)

- 7) *Issue Mapping Contextual Essay*, By Richard Rogers  
[http://www.centerforsocialmedia.org/resources/publications/issue\\_mapping](http://www.centerforsocialmedia.org/resources/publications/issue_mapping)
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## Executive Summary

The landscape of public media is shifting to accommodate an evolving, always-on digital media landscape shaped significantly by users as well as media-makers. Such a shift demands a remapping of the public media field, a project addressed by the Center for Social Media's Future of Public Media project. This new territory, which comprises online, film, print and user-generated elements, demands new and interdisciplinary research approaches. This paper examines efforts to examine three public media projects—defined as projects that engage publics for the purpose of informing them and moving them to action—through two contrasting analytical approaches. Case studies by Center for Social Media researchers, with interviews and elements of market and online research, present an “inside” look at the projects under examination, while network and issue mapping tools designed by the Amsterdam-based Govcom.org provide a more distant “outside” assessment of the impact and reach of these projects.

Comparison of the case studies of the three projects—independent documentary film *The War Tapes*, PBS documentary and outreach project *A Lion in the House*, and international blogging site *Global Voices*—revealed commonalities among these projects, and more generally among contemporary media projects attempting to survive and thrive in the volatile online environment. Emerging public media projects are mission-driven, designed to engage multiple publics, enriched by strategic partnerships and forging new pathways and routines. They also share a number of challenges with both commercial and independent media-makers: spanning multiple platforms, navigating evolving roles for editors and producers, planning for multiple moments of connection and outreach with audiences, staying abreast of ever-shifting technologies and tactics, and grappling with questions of content ownership.

While the case studies provided a wealth of data—from media-makers' personal anecdotes to audience statistics to accounts of complex outreach partnerships—the online analysis and mapping tools developed by Govcom.org provided a more quantitative analysis of the online reach of these media projects. The research team, led by University of Amsterdam's Richard Rogers, has developed a method that “scrapes” data from Google and other online sources, analyzes that data to reveal networks of sites related to particular issues or projects, and then, after content analysis by researchers, displays the data as a series of network maps using a program called ReseauLu. The evolution and use of these tools is discussed below.

A very different picture of the publics served by the three media projects under examination emerged when the case study accounts were contrasted to the Govcom.org visualizations. This paper examines the differences in approach and results, conflicting accounts of how publics might be understood and quantified, and further directions for research that examines public media.

## **Introduction**

Over the past decade, much of public media—understood by the Center for Social Media as media that mobilize publics and move them to action—has suffered a disorienting displacement.

The print and broadcasting outlets and distribution paths that supported such media are under threat of being superseded by their digital equivalents. Traditional funder bases are aging out of existence or changing their media consumption habits. New distribution possibilities afforded by readily available broadband, peer-to-peer media sharing, satellite networks, digital cable, handheld devices, and other innovations are allowing consumers to access much more media at no cost, at their own convenience, and through a variety of routes and screens.

As media infrastructures age, “content”—a catchall term that covers a variety of output that used to be tied to recognizable spheres of production, such as journalism, filmmaking, literature, photography, and art—is decoupled from both its original context and control by its creators. This process has different ramifications in different spheres of media production and consumption. Consolidation, and a resulting focus on profit over quality have rendered much of mainstream media homogenous, while a proliferation of user-generated content and the “long tail” of online niche media offer audience members a dizzying array of ever-more-segmented media products. Issue-driven, partisan, and lifestyle, and media are flourishing, while funders, governments, universities, and public media-makers struggle to construct new platforms and configurations that can draw, educate, and motivate a wide public to debate civic and global issues. They understand that media are central to public engagement in democratic self-determination, a tool so crucial that it might even be considered a human right.

While such a volatile landscape may feel precarious to media practitioners and consumers used to a more structured and top-down environment, it’s providing an unparalleled opportunity for both engaged publics and multimedia innovators. Digital networking tools are allowing communities of media-makers, citizens, activists, and experts to communicate with one another, share information, and collaboratively learn as never before. Media-makers no longer need to guess what audience members need, want, or think—they can simply include participatory avenues within the architecture of their projects. So-called Web 2.0 tools emphasize user participation above all other features, and the explosion of blogs, user-driven digital video sites, social networking sites, and collaboratively authored texts like Wikipedia testify to the power of these new models. Public media can no longer afford to lecture or to assume—to succeed they must be willing to ask, to listen, and to let their publics in.

Such a new environment demands a remapping of the public media terrain. With its Mapping Public Media research project, the Center for Social Media is working to chart that unexplored territory, both literally and figuratively, through a variety of qualitative and visual research methods. Through case studies, sector and organizational maps, data visualization, and market research techniques, the center seeks to plot the origins, circulation, and resonance of public media projects.

## **What Do We Mean by Public Media?**

While public media are popularly understood as nationally focused and funded, for the

purposes of this discussion, the term has a broader sociological meaning—one that draws upon the work of such theorists as John Dewey, Jürgen Habermas, James Carey, Benjamin Barber, and Michael Schudson.

These thinkers propose that members of the public come to know and organize themselves through communication platforms and shared social spaces. The forms and outlets for such public communication have changed over time—from the face-to-face meetings of the Roman Forum, to newspapers sold to members of the emerging middle class in eighteenth-century London coffeehouses and French salons, through the emergence of U.S. broadcast television in the twentieth century, to the international blogs and digital video sites of today. In addition to transforming the commercial media landscape, such new communications possibilities have caught the attention of researchers like American legal scholar Yochai Benkler, who argues in *The Wealth of Networks* the importance of nurturing through sound policy the development of a vigorous public sphere via electronically enabled communication.

The immediate goal of the Center for Social Media's Mapping Public Media project is to make visible and comprehensible the active and productive but rarely visible world devoted to helping audiences recognize themselves as publics and act from that knowledge. From public television broadcasts to podcasts, blogs to targeted social networking sites, independent media to public-private partnerships, a range of new possibilities and configurations is emerging. We seek to show the conversations that ensue from public media projects—from their network of production to multiple releases and moments of review, from news coverage to mentions in congressional hearings, from blog discussion to mentions by *The Daily Show* and the radio shock jock.

The larger aim is to create a method and protocol for mapping out the formation of publics around media, as well as the impact radius of any public media project. This model would reveal the resources, circuits of circulation, and connections that sustain the field of public media.

The opening project compares case studies of three public media projects that incorporate new technologies, participatory outreach techniques, and innovative partnerships to identify, attract, and constitute both broad and targeted publics. The projects are:

- *The War Tapes*, an independent film project that engaged soldiers in the Iraq conflict to film their combat experiences with assistance from the National Guard, and then experimented with blogging technologies to expand and construct publics for the film. Center for Social Media fellow Katja Wittke conducted this case study.
- *A Lion in the House*, a documentary project about childhood cancer that worked with PBS stations and ITVS to engage both cancer-care providers and families dealing with cancer to craft a film that has also served as an educational and outreach tool around the country. Center for Social Media Research Director Barbara Abrash conducted this case study.
- *OneWorld*, a global blogging site that works with bloggers around the world to expand opportunities for free speech, in the process providing a more nuanced and immediate picture of global news and concerns than the one currently provided by mainstream media outlets. Center for Social Media fellow Marty Lucas conducted this case study, with input from Wittke.

The case studies explore these public media projects from their inception to their initial public release and beyond, providing insight into their creation, production, evolution, and reception from the inside out. These intimate and nuanced profiles are then matched by an analysis that assesses the projects' impact from the outside in. Using tools and techniques developed for its Issuecrawler project, Amsterdam-based foundation Govcom.org has worked to identify and visualize the online publics and issues identified with each media. The terrain of this analysis, as defined by University of Amsterdam professor and Govcom.org director Richard Rogers, includes the news, Web, blogosphere, podosphere, tagosphere and social networking spaces, as well as film festivals, NGO networks, professional policy circles, schools, libraries, and museums.

The two approaches have yielded very different pictures of each public media project, prompting multiple questions and new avenues for exploration. The case studies and the visualizations are available in their full length on the Center for Social Media Web site (<http://www.centerforsocialmedia.org/mpm>). This paper examines commonalities among these experimental public media projects, and compares and contrasts different methods for understanding their structures, roles, and impact.

### **Public Media from the Inside Out: Commonalities among the Projects**

Individually, the stories and data gathered by Center for Social Media researchers about each media project may seem granular and specific, but in the aggregate, patterns begin to emerge. Some of the characteristics shared among the projects mark them clearly as public media, while others are a result of a larger shift in media projects due to technological and cultural changes. This initial analysis provides a rubric for assessing the public nature of other media projects that originate from a variety of sources, as well as a guide to producers working to develop public media.

#### Characteristics of Public Media Projects:

##### *Driven Primarily by Mission*

While the public media projects examined by the Center for Social Media are different in scope, platforms, and execution, all of them are mission driven and are led and supported by producers and funders who are passionate about reaching certain audiences for the purpose of informing them and moving them to new understandings—and, in some cases, actions.

For example:

- By using footage from soldiers on the front line of the Iraq conflict, the producers and directors of *The War Tapes* hoped to provide a more authentic account of the military experience that could transcend partisan debate about the war.
- By engaging directly with cancer care providers and related organizations before, during, and after the filming of *A Lion in the House*, the producers and outreach team hoped to “transform viewer responses into actions that will improve care and strengthen support systems for everyone fighting childhood cancer, especially for those who face socioeconomic challenges.”
- By soliciting content from bloggers across the globe, the founders of Global Voices hope to “build bridges across the gulfs that divide people, so as to understand each other more fully,” and to foster “conversation across boundaries,” which they see as

“essential to a future that is free, fair, prosperous and sustainable—for all citizens of this planet.”

The goal of such projects is not primarily to make money; instead they often struggle to find money in order to build and serve their publics. They also share an impulse to vault over partisan differences by providing concrete information and reporting about shared problems and experiences, creating common ground for audience members and opening up a trusted zone for conversation. Integrity and reliability are key factors in public media, even in projects that adhere to a particular political or social perspective.

#### *Designed to Engage Multiple Publics*

Each project targets and serves a number of publics, some of them clusters of affected individuals, some of them professional publics of nonprofit and advocacy organizations, and some of them the broader public of concerned citizens and media consumers. Sometimes members of these publics become producers or participants, an exchange that can be productive or overwhelming depending on the circumstances.

- For *The War Tapes*, targeted publics include current and past members of the military, bloggers, political partisans on the right and left, and the general film-going public, especially those audience members likely to seek out documentary films.
- For *A Lion in the House*, targeted publics include, among others, childhood cancer survivors and their families, cancer support organizations, pediatric oncology teams, children’s hospitals, members of the hospice and palliative care community, policymakers, and the larger viewing public for PBS.
- For *Global Voices*, targeted publics include bloggers around the world, journalists (especially in the United States, where international coverage has been dwindling), and lay readers interested in first-hand accounts of global issues in various countries and regions.

Questions remain about how to best measure the media projects' efforts to target particular publics. A comparison of the case studies, market research techniques (such as tracking broadcasts, tallying up DVD and ticket sales, reporting Web hits, and surveying competing projects), and the Govcom.org data visualizations revealed that more clarification is needed about how to define and describe publics as they manifest both online and offline. Much of the online data gathered about the film projects consisted of reviews and event or broadcast listings—a finding that does not reveal a robust online public for these projects. And yet data from the case studies and from comparisons between showings or broadcasts and related media “hits” suggest significant offline reaction to these media projects.

The very definition of “significance” came into question while comparing the different research methods. On the one hand, the case studies and media analysis emphasized the importance of each audience member, sale, blog post, or article related to the media project in question. In contrast, the data visualization method, designed to reveal large-scale online trends and tightly defined networks, made the impact of these media projects seem small. Further comparisons are needed in order to make these two methods dovetail in a meaningful way.

#### *Enriched by Strategic Partnerships*

Because these public media projects often intersect with the professional spheres related to the issues they address, they develop strong and mutually beneficial partnerships with associated nonprofits, foundations, and government agencies.

- *The War Tapes* project engaged members of a New Hampshire National Guard unit to film their experiences, working closely with the public affairs officer of the New Hampshire National Guard in the process. Director Deborah Scranton also sought funding and assistance from the Barred Rock Fund, staff of Chicago's Kartemquin Films, SenArt Films, and individual donors. In conducting outreach, the *War Tapes* team reached out to both military Web sites, such as Military.com and the Iraq and Afghan Veterans of America, and liberal groups, like MoveOn.org.
- *A Lion in the House* involved a dense and wide-ranging network of partners, funders, outreach organizations such as ITVS, regional public television stations, and cancer-related groups, as well as the Centers for Disease Control and Prevention. National partners included: the American Academy of Pediatrics, the American Cancer Society, the Association of Oncology Social Work, the Association of Pediatric Oncology Nurses, the Centers for Disease Control and Prevention, the Children's Cause for Cancer Advocacy, CureSearch: Childhood Cancer Foundation, CureSearch: Children's Oncology Group, Gilda's Club Worldwide, the Health Ministries Association, the Hope Street Kids, the Intercultural Cancer Council, the Lance Armstrong Foundation, the Leukemia & Lymphoma Society, the National Association of Social Workers, the National Black Nurses Association, the National Cancer Institute, the National Hospice and Palliative Care Organization, the Oncology Nursing Society, Padres Contra El Cáncer, and Youth Service America.
- Global Voices has been housed at Harvard University and partners with individual bloggers around the globe to cull the most relevant blog posts from their regions. The site also has a partnership with the Reuters, which helps to supply international reporting to the news agency.

In contrast to partnerships in the commercial world, which tend to be of a financial nature, or meant to enhance “synergy,” these partnerships represent shared goals and publics and may actually lead to the formation of new publics and projects. Such partnerships, however, can also lead to questions about independence and editorial control.

### *Forging New Pathways and Routines*

Each of the projects we’re examining has been an experiment that develops new publics and pathways for creating publics that may be replicable. These are still experimental days in terms of widely available broadband and users’ familiarity with interactive tools, and each media project using these new tools has the potential to pioneer lasting protocols. Like hiking trails, some of these paths will become wider and others will grow over.

### Characteristics of Contemporary Media Projects:

The projects in question also shared characteristics common to many current media endeavors, public or otherwise. These commonalities reflect efforts to survive and thrive during the tumultuous changes in the overall media landscape.

### *Spanning Multiple Platforms*

While each project is associated with a primary platform (independent filmmaking, Web-based reporting, broadcast), they also often produce collateral materials in other genres or settings in order to broaden their reach. For example, *The War Tapes* team experimented with blogging on their Web site; the Global Voices site includes not just blogs, but podcasts; and the *Lion in the House* project includes a companion book, educational materials, and a number of related Web sites. It seems that it is no longer sufficient to work in only one mode, although it might be useful to find out if each of these platforms draws comparable audiences. However, because different platforms yield different sorts of data about audience reaction (box office draws, DVD sales, online “hits,” reader comments, event attendance, etc.), more research is needed to determine how to productively assess the impact of each platform.

### *Evolving Roles for Editors and Producers*

The interactive nature of these media projects shifts the emphasis for editors, filmmakers, and producers from authorship to curatorship, aggregation, and moderation. Soliciting members of publics to contribute their own content, ideas, and comments means giving up control of a media project in exchange for authenticity and engagement. These shifting roles put pressure on the definition of professional media-makers—at what point are contributors to a project paid or formally recognized, such as the soldiers who filmed footage for *The War Tapes*, or the bloggers who contribute to Global Voices? How can editors, writers, and producers justify their salaries in an era of empowered amateurs?

Online projects such as Global Voices, which attempt to fulfill both reporting and community-building missions, also confound older definitions of journalism and advocacy. When audience members are also media producers, standards of journalistic objectivity are displaced by a preference for authenticity, personal experience, and on-the-ground information. The priority placed on providing space for multiple “voices” demonstrates a different orientation towards what matters most in public communication. While, as in



traditional journalism, facts are provided and stories are told—and journalists do draw on those tips, narratives, and sources—the citizen journalists and advocacy groups that publish material on such sites are not reporting in quite the same way that professionally trained journalists do. Bloggers and citizen journalists are launching new discussions about professionalization, ethics, copyright practice, fact checking, libel, confidentiality and other topics that have long plagued the journalism community. These new efforts to determine standards and practices raise a host of questions that bear further research.

### *Multiplying Moments of Connection*

It's no longer possible for media scholars or producers to visualize a straightforward production path, from project conception to funding to broadcast to reception. With multiple platforms, broadcasts, and distribution methods, there are many moments along the timeline of a project when an audience member might encounter and respond to it. The node maps created by Center for Social Media research fellow Katja Wittke suggest the complex structures and relationships engendered by such new configurations. Govcom.org's visualizations of Web data capture only a snapshot; the ground is constantly shifting, and the possibility of attracting new or unexpected audiences is ever-present. Online events can spark the creation of offline publics and vice versa. These new realities demand new models for depicting and explaining the lifecycles of public media projects.

### *Ever-Shifting Technologies and Tactics*

Every media project also now faces choices about how to evolve and expand via multiple platforms, technologies, and distribution possibilities. Online-only media projects are especially vulnerable to becoming obsolete as technologies, design trends, and participatory tools transform. Future media projects will need to regularly budget for upgrades, maintenance, and unforeseen technological contingencies.

### *Grappling with Ownership Questions*

Who owns a media project with multiple collaborators and partners, with contributions from individuals, with shifting platforms and uses? The projects we're examining open up numerous questions about authorship, copyright, and credit.

In addition, public media projects that actively engage their publics as creator and coproducers face a range of ethical dilemmas. For example, is providing a space for underrepresented perspectives to be posted a service—or an exploitation of labor? How much control should contributors be granted over the media project that their contributions fuel? Who profits if user-generated content is repackaged or syndicated? And who pays the price if users appropriate content owned by other copyright holders? These questions are playing out right now in the courts and across the wires.

## **Public Media from the Outside In: Visualizing Networked Publics**

### *The Evolution of the Issuecrawler*

The maps and visualizations produced by Govcom.org for the Center for Social Media represent one set of methods for depicting the resonance of public media projects. Govcom.org researchers harnessed data from the project Web sites in a variety of different ways to assess the projects' reach, networks, and success. Their research method was informed by earlier experiments with a Govcom.org tool called the Issuecrawler.

The method relies on data gathered via “scrapes” of Google searches—structured searches that isolate the occurrence of particular terms within a site or across a network of sites. Researchers then graph the data using various configurations provided by network mapping software called ReseauLu. This analytical software by aguidel.com, used at the Ecole des Mines, Paris (Bruno Latour and Michel Callon’s group), performs co-occurrence analysis and provides visual representations of relational, chronological, and textual databases.

Govcom.org’s tools have evolved alongside the Web. As Internet technology has changed multiple times since the launch of the Mosaic browser the early ’90s, so have the methods for analyzing it—as well as the visual and metaphorical models for understanding online communication more generally. Rogers described these shifts in an October 2006 paper, “Mapping Web Space with the Issuecrawler”

([www.govcom.org/publications/full\\_list/issuecrawler\\_1oct06\\_final.pdf](http://www.govcom.org/publications/full_list/issuecrawler_1oct06_final.pdf)). For him, examining the technological underpinnings of online communication allows for the development of a “Web epistemology”—an emergent understanding of the origins and consequences of how the Web recommends information. Comparative projects—for example, comparing the data turned up in the case studies by Center for Social Media researchers versus data gathered by Govcom.org researchers—contribute to this epistemological project.

“The question posed here concerns how Web space is conceptualized by devices that have sought to ‘map’ the Web,” Rogers writes, “especially without employing conventional political-geographical cartography or borrowing from geological metaphors, such as thematic islands, peaks, or valleys.”

According to Rogers, the initial phase of Web visualization involved an understanding of the Web as a series of hyperlinked pages. Visual metaphors used to illustrate this included those drawing upon astronomy (hyperspace as outer space), “path” research (depictions of online navigation from place to place), and public sphere theories (online interactions as akin to face-to-face communication spaces, such as a roundtable.) Simple associational charts depicted sites as connected to one another without specifying the directionality of the links.

Early forays using Issuecrawler attempted to move away from this model, and instead “concentrated on the Web as selective associational space,” looking at both networks of related links and the way that those networked links connected to one another. It ranked and categorized organizations by domain name (.gov, .org, etc.) and links by type—“cordial, critical or aspirational.”

The next phase of Web visualization built upon the growing importance of “inlinks” or the number of sites linking to a particular site as a measure of its relevance and influence. This model was based on Google ranking practices, and became more dominant as “trackbacks” became more visible across the Web. “In all,” Rogers writes, “concern with inlinks as a marker of page relevance or reputation marked a major shift in the underpinnings of Web space.” The rising importance of such rankings eroded the sense of the Web as a “pluralistic” space—one that provided access to varying levels of projects and organizations “side-by-side,” without vesting them with hierarchies. The analysis of inlinks revealed a critique of the “public sphere” metaphor, showing varying levels of connection to conversations about particular issues rather than a discussion or debate among peers.

Accordingly, the next phase of online development and of Issuecrawler research had to do with the analysis of online interactions as networks. Rather than imagining online debates as

metaphorical discussion spaces, this phase involved visualizing the participants in “issue networks” as connected but not necessarily conversing, or even friendly. “The Web could not stand in for a building—or an event where debating parties could gather,” Rogers writes, noting that “Actors may be antagonistic, oppositional, adversarial, unfriendly, estranged.” A new metric for analyzing the influence of particular sites arose from this understanding—as “sociable” vs. “under-socialized.”

Issue networks as defined within the analysis of Issuecrawler also did not necessarily privilege individuals or groups as subjects of research—but might include such “argument objects” as news stories, documents, images, or databases. “Taken together,” he writes, “these actors and ‘argument objects’ serve as a means to interrogate the state of an issue either in snapshots or over time.”

The end result, claims Rogers, is a snapshot of a “public real”—the network of people, organizations, and “argument objects” most closely related to a particular issue. While data available online may not represent the full scope of discussions about a particular issue, online spaces such as blogs, social networks, discussion boards and published listservs have opened up new possibilities for researchers to find and quantify discourse that extends far beyond press coverage or official communications. As the Web has become more integrated into both professional activities and personal communication, it has become more difficult to segregate online and offline analysis. The Web can no longer be understood entirely as a separate sphere with its own culture and dynamics, nor can it stand in as a proxy for the entire discourse about a topic.

In an follow-up paper titled “Issue Mapping Contextual Essay,” posted on the Center for Social Media site ([http://www.centerforsocialmedia.org/resources/publications/issue\\_mapping](http://www.centerforsocialmedia.org/resources/publications/issue_mapping)), Rogers reported on further evolutions of the Issuecrawler and allied tools. The Issuecrawler is designed to perform co-link analysis by uncovering the occurrence of particular issues across a network of related sites. Now, allied tools and projects, including the Issue Dramaturg and a new Govcom.org project called Advanced Web Metrics—build upon this work to measure the impact of particular sites via Google ranking, and newer online “ratings” sites and tools, such as delicious (<http://del.icio.us/>) and Technorati (<http://technorati.com/>). These new approaches help to measure how the association of a site and an issue rise and fall over time—the site’s “authority” on that issue. Rogers characterizes this research approach as “circulationist,” in contrast to a “diffusionist” approach, which would consider a site’s “Web presence” as constituted by its design, content, freshness, etc. He explains:

Thus, the circulationist, when considering presence, would define a site and its contents through how it is indexed, linked, referenced, syndicated and tagged, and not by its content, freshness, design and features.

The extent to which the site is referenced—or enrolled—by networks defines its presence. Finding the site, which is one means to think of a site’s capacities and agency, is determined by the network. More specifically, a site’s presence steadies and climbs through references from others, especially from those sites that are themselves ‘highly authoritative.’ Is the site well-linked to, well-blogged, well-tagged, and by whom? ‘Authority’ online, as measured by everyday Web devices like Google, Technorati, Digg and others, begins with those simple starting points.

### *Networks vs. Publics: Making Distinctions*

These tools help to reveal whether issues move from actor to actor, or actors move from issue to issue. Are networks in place to form around issues? Or do issues spur network creations? These are open questions—as is the question of how these online networks correspond to the media projects and engaged publics that are under examination by the Center for Social Media.

One example may help to clarify some of the issues involved. A Govcom.org project examined the policy impact of several Ford-funded media justice organizations: Funding Exchange, Media Alliance, Media Tank, United Church of Christ, and the Youth Media Council. Impact in this case was measured in terms of citations by leading policy actors, whether positive or negative.

The URLs of the organizations were fed into Issuecrawler to identify the “immediate neighborhood” of the activists. The resulting network comprised approximately 20 media justice actors and the FCC, which is their main policy target. The FCC was subsequently queried for each of the names of the organizations in order to ascertain whether the FCC references the actors. Content analysis was also performed, showing the leading issues in the network. . The terms that were revealed were: “big cable,” “community media empowerment” and “broadband as public service.” Again, the FCC was queried for these issues, together with the names of the groups. Such research shows the extent to which a network's policy target acknowledges the work of the network. By repeating this analysis over time, the project was able to chart the growth of the network and the rise or fall in the acknowledgment of their work by their policy target. Analyses of the growth of the network were performed using this Issuecrawler tool:

<http://tools.issuecrawler.net/beta/comparenetworksovertime/>.

“In analyzing network growth over time, the crucial measure for an individual actor is change in inlink count.” Rogers writes. “For specific networks, monitored for example by funding agencies, significant change in actor inlink count is similar to a rise or fall in one’s search engine position for e-commerce and other actors.”

This piece of research addresses a question that’s crucial to activists, funders, and policymakers: How can one measure the impact of an issue-driven campaign? Keyed to specific terms, and producing a visually intriguing and quantifiable result, Govcom.org’s research provides powerful evidence about the growth and interconnection of advocacy networks in the online era.

However, it provides less information about the publics for the advocacy organizations’ campaigns. The primary “public” chosen for analysis—FCC policymakers, as represented by information published on the FCC site—seems to have no official response to network’s issue advocacy. The responses of other institutional and individual publics—activists, scholars, communications professionals, engaged lay readers—are measurable only in terms of concrete online actions, namely, linking to the organizations in question.

Offline engagement related to these policy issues and advocacy organizations—such as meetings or demonstrations—is beyond the scope of this particular analysis. More passive online engagement is also elided by this approach: site traffic, e-mail list subscriptions, petition drives, even online discussion. By elevating links above other forms of connection and response, this research method provides a telling but partial measurement of

engagement.

#### *Mapping Media Publics Using the Issuecrawler Toolset*

Nonetheless, Govcom.org's efforts to visualize "issue networks" are much like the Center for Social Media's efforts to envision and describe the publics generated via public media projects. Both involve analyses of multiple actors (both individual and institutional) who are connected via a media platform and share interests, issues, and practices.

In the context of the three media projects explored above, how does the data gathered by the case study researchers, who took an "inside" look at the public media projects via interviews with the media-makers stack up against an "outside" assessment of the projects' authority and influence? Each of Govcom.org's analyses draw upon slightly different methods, as outlined in the project's analytical research protocol ([http://www.centerforsocialmedia.org/files/pdf/map\\_research\\_protocol.pdf](http://www.centerforsocialmedia.org/files/pdf/map_research_protocol.pdf)).

A look at Govcom.org's analysis of the "networked publics" for our three public media projects reveals some key differences:

#### The War Tapes

See: [http://www.centerforsocialmedia.org/files/pdf/War\\_tapes\\_maps.pdf](http://www.centerforsocialmedia.org/files/pdf/War_tapes_maps.pdf)

Rogers and his research team conducted three analyses of online responses to *The War Tapes* as of September 27, 2006. The first of these analyses—titled "The War Tapes—Where are the Publics?"—provides a telling example of how different research approaches can yield very different results.

Govcom.org examined mentions of the film in three related blogging spheres: "Military Spouses and Families Blogs" (17 blogs queried), "Veterans Blogs" (20 blogs queried) and "Milbloggers" (82 blogs queried). Govcom.org harvested these blog lists by scraping the site of blackfive.net—an influential milblogger—for related links. In doing so, they hoped to identify an authoritative network of bloggers, and then see if those bloggers were discussing *The War Tapes*.

The network of sites established, the researchers then queried that network for mentions of the term "The War Tapes." In total, 9 of the 119 blogs queried mentioned the film: 4 of the blogs by military families and spouses, 2 of the veterans' blogs, and 3 of the milbloggers. Based on this analysis, Rogers and his team concluded that the film had "missing publics"—that the number of mentions generated among the network of military blogs was "insignificant."

How does this finding compare to the data uncovered via interviews and market research about the film in the case study conducted by Center for Social Media researcher Katja Wittke?

As a project that engaged active soldiers via online technologies, including digital video, instant messaging, and e-mail, *The War Tapes* seemed perfectly positioned to catch the interest of the universe of milbloggers dedicated to discussing the Iraq conflict and related issues. Indeed, Wittke's research reveals that the filmmakers' outreach plan involved making connections to the blogging and military communities, first via blog posts on *The War Tapes* site about the film, and then,

when the site was converted to a more static presentation in the summer of 2006, via partnerships and advertising and distribution arrangements with military membership organizations, such as Military.com, the American Legion, and Iraq and Afghanistan Veterans of America. The filmmakers did some viral online promotion themselves; they blogged about the site on “milblogger sites, independent film sites, political sites, and citizen journalism sites,” and it was “mentioned by some leading bloggers such as the diarists on DailyKos.” In addition, interested viewers could sign up for screenings of the film using Frappr, a Web 2.0 mapping tool. Wittke also reports that the filmmakers saw significant interest and response to the film from individual soldiers who attended screenings, and the National Guard responded positively to the film. A Lexis-Nexis search of “media hits” from April to November 2006 generated 209 results.

Bloggers, Wittke reports, did respond to the film. “A Technorati search of the exact phrase ‘the war tapes’ on December 4, 2006 revealed that the film was mentioned on 1848 blogs, of which 285 blogs were rated as having ‘a lot of authority.’ Restricting the search to the ‘military’ tag resulted in 44 military blog posts about *The War Tapes*, including the top two military blogs, Outside the Beltway and the Mudville Gazette. In addition, the film team successfully scored blog entries with two milbloggers that are very influential in the military community, Andisworld and Blackfive.”

With all of this activity, how could Rogers and his team have found “insignificant” activity among the milblogging community? The answer lies in Govcom.org’s methodology for defining issue networks. According to Rogers, using blackfive.net—an authoritative source within the milblogging community—as a control for defining that universe of bloggers is “both careful and verifiable.”

Indeed, much of the online activity identified by Wittke would not fit into an analysis of military blogging activity, as it does not appear on milblogs per se. Instead, this activity happened on the blog of the film itself, on Web sites that don’t use blogging software, on the online versions of print and broadcast outlets, or on political or documentary blogs. Second, the blog results that she mentions as indexed by Technorati reflect individual posts, as opposed to mentions by domain name (or by individual bloggers with blogs hosted on the same domain name), as tallied by Rogers and his team—a significant difference in magnitude. Third, the definition of “blogs” and particularly of “milblogs” as devised by the Govcom.org team is much more restricted and controlled than the data provided by a Technorati search. Finally, it is notable that the common names of bloggers (the names by which they are referred to in discussions and media coverage) don’t always correspond with either their given names or their blog names; for example, prominent political blogger Duncan Black is better known by his pseudonym “Atrios,” which he uses to blog on his site, called Eschaton. Such variations can make research of the blogging sphere difficult to correlate.

Govcom.org’s method—identifying a network of related issue actors by culling links from one or more of those sites—is designed to weed out Web sites (or in this case, blogs) that are not authentically involved in an issue debate. In the case of blogs, this methodology is underscored by bloggers’ tendency to generate “blogrolls”—lists of links to related sites, a popular feature on commonly used platforms like blogger.com. The reasoning is that a cluster of sites involved in a particular issue are

more likely to link to sites that they find relevant—whether they agree with them or not. Therefore, the network revealed through this method will more accurately reflect the players involved with a particular issue than a simple Google or Technorati search on the issue keywords might.

The term “blog” itself is imprecise. While “blogs” came into popular consciousness in the United States in the context of the debate surrounding the war, and later in the context of partisan political activism, any site using content management systems (CMS) or blogging software that allows users to easily post sequential entries might be considered a “blog.” Such sites have proliferated, and in terms of content, visual design and purpose are now becoming interchangeable with the earlier generation of sites created using flat HTML files. For example, a search of “The War Tapes” on Technorati on May 6, 2007, reveals a range of posts made via sites set up using blogging software—from reviewers, digital video sharing sites, promoters at Amazon.com, a college student panning a band called War Tapes, etc. This messy set of results stands in sharp contrast to the targeted list of topic-specific blogs produced by Rogers and his team.

Wittke’s research does overlap with Rogers’ in terms of the influential milbloggers she identified via restricting her Technorati search and interviewing the filmmaking team. Outside the Beltway, the Mudville Gazette, and Blackfive all appear in the analysis performed by Rogers’ team. Andisworld, which Wittke also mentions, doesn’t appear in the initial set of results, although it’s notable that only 36 of the 82 sites that the Govcom.org researchers identified as “Milbloggers” appear on the visualization that accompanies the analysis for reasons of space (“and more” concludes the list).

This comparison of different research approaches demonstrates how challenging it can be to “map” the impact of public media projects and identify the publics they generate. On the one hand, Govcom.org’s research more accurately pinpoints the self-identified universe of milbloggers (one desired “public” for the film), and assesses the resonance of *The War Tapes* among that restricted universe through compelling visualizations. Through online search methods, this research also turned up the names of specific blogs that Wittke’s research did not. On the other hand, Wittke’s research reveals a wide variety of responses to the film among different audiences that may or may not be classified as “publics”—some participants in the film’s creation, some professionals responding to the film as part of their job (reviewers, members of awards committees), some political partisans, some moviegoers interested in the documentary form, and some uncategorizable.

### A Lion in the House

**See:** [http://www.centerforsocialmedia.org/files/pdf/Lion\\_maps.pdf](http://www.centerforsocialmedia.org/files/pdf/Lion_maps.pdf)

In the case of *A Lion in the House*, the Govcom.org team sought to identify all mentions of the film on the Web by querying Google for the term “A Lion in the House” on September 13 and 17, 2006. They then plotted the 515 separate domain names of sites that mentioned the film two or more times on a network map titled “A Lion in the House—Overall Actor Map.” Rogers’ researchers then coded these returns in two ways: by domain type (with .com being the most common at 228 instances, and .org second most common, at 180 instances, suggesting a strong



interest among or participation by nonprofit organizations) and by context (determined through content analysis of the links by Govcom.org researchers). The context categories that researchers eventually developed included:

- airing alert/recommendation (non-PBS)
- faith
- festival
- fund-raising
- legislation
- outreach
- production
- promotional
- public broadcasting (announcement)
- review/listing
- screening and panel discussion
- other substantive.

These categories were then collapsed for the “Overall Actor Map,” according to which the most common categories that emerged were “Airing Announcement/Viewing Recommendation (non PBS),” “PBS announcement,” and “Review/Listing.” These promotional links were then followed in frequency by more substantive context categories, including “Outreach Project,” “Screening and Panel/Workshop/Conference,” “Legislative” and “Faith-based Reflection.” Govcom.org researchers then used these contexts for further analysis of online references to the issues discussed in the film.

The network map generated by Govcom.org to depict the “actors” referencing the film online more than twice does not suggest any particular relationship of those actors to the film, although larger “Web sites” icons for the domain names “pbs.org” and “itvs.org” suggest a density of links on those sites. However, the case study of *A Lion in the House* by Center for Social Media research director Barbara Abrash reveals that the film was the product of an intensive outreach campaign, both during and after its production. PBS and ITVS were central partners in that outreach effort, but the filmmakers also performed their own outreach and fund-raising activities. As a result, the film ended up with an impressive list of partners (noted above). And yet a comparison of the results generated by Govcom.org’s Issuescraper search and this list reveals that only 11 of these 21 partner organizations were discovered by Govcom.org. (Those organizations include: the American Academy of Pediatrics, Association of Pediatric Oncology Nurses, Centers for Disease Control and Prevention, Health Ministries Association, Lance Armstrong Foundation, Leukemia and Lymphoma Society, National Association of Social Workers, National Cancer Institute, National Hospice and Palliative Care Organization, and Youth Service America and Gilda’s Club Worldwide.)



What might account for this discrepancy? There are a number of possibilities. The first is that the URL for the organization in question doesn't match the organization's name—since the search for each partner organization among the raw data of Govcom.org's results was performed using the "find" function of Word. A second possibility is that the sites in question didn't mention the phrase "Lion in the House" more than twice in the period covered by the Google scrape. A third possibility is that the film was mentioned, but in formats (PDFs, images, Flash files) that wouldn't be indexed by a Google search. A fourth possibility is that the sites don't allow "robots" such as those utilized by Issuecrawler to search deep into their file structure. And a final possibility is that some of the partner sites hadn't been indexed at all by Google at the time of the Google scrape.

This last possibility is the least likely—a May 6, 2007, Google search of the remaining 10 partner organizations reveals that all of them have URLs indexed by the search engine. However, when the organization names are combined with the term "lion" in the search engine, paired results do not always come up. Instead, what comes up most often is the page created by outreach partner ITVS, which lists all of the film's partner organizations ([www.itvs.org/outreach/lioninthehouse/partners.html](http://www.itvs.org/outreach/lioninthehouse/partners.html)).

The case study of *A Lion in the House* also provides accounts of a number of significant outreach activities that might or might not have corresponding documentation online. According to Abrash, the filmmakers traveled to a variety of conventions, forums, cancer care organizations, government offices, community settings, and schools to present clips from the film and seek feedback during production. They worked with local PBS affiliates to develop outreach and training materials and sponsor health fairs and public screenings. Working with ITVS, they organized a "Regional Outreach Summit" that brought together a number of the organizations that filmmakers had been visiting, hoping "to forge relationships between cancer support and community organizations." The ITVS campaign also distributed 1,000 DVDs containing a trailer and clips. Additional ripple effects from a slew of regional outreach efforts tied to PBS stations included the creation of an online survivorship survey, the granting of continuing education credit to oncology professionals for watching the series, and the formation of pediatric and adolescent cancer coalitions in Chicago and Southeast Texas. With support from the Centers for Disease Control and Prevention, a series of 12 modules based on expanded stories from the documentary are in production.

While Govcom.org's "Overall Actor Map" doesn't reflect much of this activity—and in some cases, couldn't hope to, since it took place offline—it might reveal audiences and publics that the case study doesn't. Domain names such as "mcnblogs.com" and "blogs.dfw.com" suggest that some bloggers might have taken an interest in the film, while domain names such as "seattleweekly.com" and "arts.guardian.co.uk" hint at media coverage that's not examined extensively in this case study. One of Govcom.org's additional maps, titled "Clusterings of Issues and Publics (by Settings)" and "Specific Conversations Per Public Space," also offer an intriguing snapshot of how certain issues associated with the film came to the forefront in different public contexts. So, for example, on public broadcasting sites, the issue of "survivorship" emerged as the most common theme, while at the Sundance film festival, the conversation centered around healthcare disparities. These findings offer a

provocative glimpse at how media projects are framed for different publics according to institutional mandates and perceived audience preferences.

In the end, the Rogers team concluded, “*A Lion in the House* organizes distinctive and significant substantive conversations according to the setting in which it is discussed and/or screened.” However, the real meat of Govcom.org’s analysis of the resonance of *A Lion in the House*—the examination of related issues by settings and conversations by public space—could have been much enriched by the inclusion of some of the data about local events and screenings turned up in the case study.

In the case of *A Lion in the House*, comparing the different research methods also uncovered a different concept of “publics” among Govcom.org researchers and Center for Social Media researchers. According to Rogers, “‘Publics’ are analyzed symmetrically, i.e., there are no privileging assumptions in advance as to what constitutes a more genuine ‘public.’ People doing their jobs are publics, people watching a film are publics, people blogging about the film are publics, people organizing screenings are publics, etc.” In other words, each of the sites represented in the “Overall Actor Map” are part of the “networked public.”

The Center for Social Media, however, has a more stringent and active definition of the “publics” generated via public media. Publics, in this model, consist of audience members who use media to recognize shared issues and act upon them. Those publics do not include creators or promoters of the media project, or Web sites that list related events. Once such sites are removed from consideration, however, the visible “networked public” as discovered via Issuecrawler shrinks considerably.

### Global Voices

**See:** [http://www.centerforsocialmedia.org/files/pdf/Global\\_voices\\_maps.pdf](http://www.centerforsocialmedia.org/files/pdf/Global_voices_maps.pdf)

In many ways, the analysis of the Global Voices project was the most complex, both for Center for Social Media researchers Martin Lucas and Katja Wittke and the Govcom.org team. The site—which includes edited contributions from bloggers around the world, translations of blog posts, regional roundups of significant blog topics, links, comments, podcasts, and more—offers audience members many different points of entry and identification. Readers can easily become contributors by participating in comment threads, and in turn, many of the site’s users are professional journalists. Sorting out the identity of “publics” for the site—networked or otherwise—is no simple matter.

Govcom.org decided to address this challenge by analyzing both posts and comments for the site from October 1, 2005, through October 1, 2006. Using the Issuecrawler tools, they scraped the site for this period, ending up with 1,415 posts representing the output of 112 distinct bloggers, and 3,038 comments generated by 2,005 distinct commentators. They then used the country tags associated with each post to plot the “conversations” on a globe (It’s important to note here that this analysis does not specify where bloggers or commenters are located; instead, geographical tags indicate the country or region under discussion.) The resulting graphic, however, titled “Global Voices Online: A Conversation Geography,” does not follow geographical mapping conventions. Instead, it maps the density of the “conversations” about particular regions, and then correlates them with issue tags to

develop a visualization of which issues are strongly linked to particular countries or regions. For example, human rights, media, freedom of speech, and Internet are most significantly related to China. In addition, they found that “The Middle East, Africa and to a lesser extent Central Asia, South Asia and the Caribbean regional clusters, have rather distinctive issues.”

The Govcom.org team also decided to test the site’s definition of “bridge bloggers.” As of October 10, 2006, the site described them as follows: “blogs designed to increase communication between people from different countries and cultures. A blog written to explain local politics, events and culture to a global audience is a bridge blog” Govcom.org researchers operationalized this research question by examining whether commentators who commented on a posting with a particular country tag commented on other postings with other country tags. Finding that they often didn’t, concluded that “There are few issues that cross more than 3 regions [therefore] ‘Global Voices’ are regional voices.”

However, this definition of “bridge bloggers” is problematic in a number of ways:

The first is that the tags analyzed by the Govcom.org team denote the topic of the post, but not necessarily the location of the blogger. Posts by commenters don’t even carry tags, so no geographical information about them is available either. So, while it may be true that the conversations cluster around particular countries and related issues, as the “Conversation Geography” map suggests (and as Global Voices interviewees confirmed in the case study), it’s not as easy to claim that “bridge bloggers” aren’t “increasing communication between people from different countries and cultures.”

In addition, the bloggers and commenters represent only the most active participants on Global Voices; the analysis does not include any kind of larger audience analysis, such as the Global Voices survey described in the case study. A geographical breakdown of the nationality of the 231 survey respondents showed 32.9 percent to be from the United States, 7.8 percent from India, 5.2 percent from the United Kingdom, 4.3 percent from Canada and 3.9 from China. Given that the most active conversational clusters identified by the Govcom.org researchers were about the Middle East and Africa, and readers from those regions weren’t represented in the survey results, it would stand to reason that site visitors reading those blog posts would be learning something more about those regions than they knew before.

Finally, the definition of “bridge blogging” as understood by the Govcom.org team doesn’t line up entirely with the description of “bridge bloggers” from the case study. This may represent a shifting understanding of the term by the Global Voices project. According to Lucas, Global Voices invented the term to describe “bloggers who were already aggregating or linking to other bloggers locally in different regions of the globe.” By this definition, bridge bloggers were always regional actors, not necessarily expected to facilitate cross-regional communication on the site, but rather to bring a synthesis of blogs and issues from their regions to a larger body of readers. This point bears further clarification.

And while Govcom.org’s analysis of the commenting patterns of Global Voices users is interesting, it doesn’t necessarily describe the “publics” for the site, since not much is revealed about individual commentators’ location. (Such anonymity is also

built into the site structure, and may actually encourage participation, since readers who live in more repressive countries don't need to fear repercussions.) It does, however, indicate which issues might be the most compelling for those audience members concerned with a particular region, which could prove useful.

The case study suggests other avenues for exploring the publics for the Global Voices site, including but not limited to the regional bloggers whose work is being aggregated, professional and citizen journalists in the United States and around the globe, international free speech advocates, students and teachers, activists or NGOs interested in tracking a particular issue around the world or advocating a particular point of view within their region, and peacemakers looking to promote dialogue in regions of conflict. While these categories of possible publics are only represented anecdotally in the case study, this array of possible publics seems promising.

### **Implications for Further Research**

The paired research efforts by Govcom.org and the Center for Social Media researchers were originally envisioned as parts of a whole. But the research results paint quite different pictures of the three media projects under study.

On closer examination, it seems clear that “networked publics” as defined via the Issuecrawler and allied tools are not the same as the publics envisioned by either the media-makers or the Center for Social Media researchers and make up only one set of measurable responses to media projects. Case studies, on the other hand, often lack the empirical scope of quantitative data analysis, and in focusing on the intent of the media producers, miss some of the unexpected responses to the media project that the Issuecrawler tools can catch.

These distinct accounts of the impact of these projects and the publics they serve underscores the need for both further research and a more rigorous assessment of research tools and methods related to public media. Both researchers and media-makers need to better understand which analysis methods will work best to what ends.

While commercial media projects can rely on more empirical benchmarks, such as sales, audience numbers, Web hits, or media attention to judge the success or failure of their products, public media projects face a more complex task. As the case studies reveal, public media projects can make an impact in ways that are unpredictable and difficult to measure. For example, *The War Tapes* is being used to educate older National Guard members who have not been deployed about the experiences of soldiers on the ground. *A Lion in the House* has helped to create a new web of national and local partnerships around the issues of childhood cancer. And Global Voices finds itself at the center of an international debate around censorship and freedom of speech. These are unfamiliar and active roles for media projects, moving far beyond entertainment, education, or journalism. They are roles specific to public media, and as such deserve their own standards and benchmarks.

This project also suggests that further research should be conducted in the area of visual representations of media structures and impacts. Two current proposals for the center's research in this area are an analysis of the use of geomapping tools among public media projects and an examination of different sorts of maps as themselves forms of public media.

The ongoing efforts of media-makers and media scholars to visually contextualize distributed systems and highlight particular facets and connections, to demonstrate the impact of particular media types or producers through graphic representations, and to “get

on the same page” suggests that mapping the public media field is a fertile research area for the Center for Social Media, as well as the larger communications field.